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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,555	10/07/2004	Andrew James Goodwin	MSP617NAT1	9247

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EXAMINER

SELLMAN, CACHET I

ART UNIT	PAPER NUMBER
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1792

MAIL DATE	DELIVERY MODE
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10/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/510,555

Applicant(s)

GOODWIN ET AL.

Examiner

Cachet I. Sellman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-14 and 20-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1, 5-15, 20, 22-24 is/are allowed.
- 6) ☒ Claim(s) 21 and 25-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Acknowledgement is made of the amendment filed by the applicant on 8/9/2007, in which claims 1, 5-6, and 9 were amended, claims 2-4 were cancelled and claims 20-31 were added. Claims 1, 5-14 and 20-31 are currently pending in U.S. Application Serial No. 10/510,0555.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 21 is directed towards a method, however, claim 9 from which it depends is directed towards an apparatus.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 24-28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanisaki et al. (US 5340618) in view of Kolluri (WO 98/10116).

Tanisaki et al. teaches a method for treating a powder using a plasma reactor under atmospheric pressure. The process comprises introducing a monomer gas into the reaction chamber (col. 4, lines 20-54 and Fig. 1 (14)) and separately transporting the powder substrate to be coated into the atmospheric discharge (col. 3, lines 52-66) and exposing the powdered substrate to the monomer gas.

Tanisaki et al. does not teach atomizing the liquid coating forming material as required by **claim 25**.

Kolluri discloses a monomer delivery system that is used for a chemical vapor deposition apparatus, which comprises at least one ultrasonic atomizing nozzle for supplying a vaporized liquid monomer to the reaction to deposit a film on a substrate (abstract). Kolluri's process provided a substantially uniform atomized mist at a precise and controlled rate to the chamber and deposits uniform coatings on all sizes of substrates without the need for expensive or complex arrangements (page 3, lines 12-17).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process of Tanisaki et al. to include the monomer delivery system of Kolluri. One would have been motivated to do so because both disclose process where a film is formed on a substrate using a vaporized monomer and

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Kolluri further teaches using the ultrasonic atomizing nozzle provides a substantially uniform atomized mist at a precise and controlled rate to the chamber and deposits uniform coatings on all sizes of substrates without the need for expensive or complex arrangements.

The powdered material is entrained in a carrier gas as required by **claim 26**.

4. Claims 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanisaki et al. in view of Kolluri as applied to claim 1 above in view of Phillips et al. (US 6241858 B1).

The teachings of Tanisaki et al. in view of Kolluri as applied to claim 1 are as stated above.

Tanisaki et al. in view of Kolluri does not teach that the powdered substrate is on a support as required by **claim 27**.

Phillips et al. teaches a process for uniformly depositing a coating material from a vaporized source onto a powdered substrate material to form a thin coalescence film of coating material where the substrate can be pigment particles on a vibrating conveyor or bed coater so the particles are uniformly exposed (abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process of Tanisaki et al. in view of Kolluri to include the vibrating conveyor of Phillips et al. One would have been motivated to do so

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because both disclose process for coating a powdered substrate and Phillips et al.

teaches using a vibrating conveyor allows for uniform coating of the particles.

Phillips et al. teaches using a vibratory conveyor coater as required by **claim 28**.

Allowable Subject Matter

5. Claims 1, 5-14, 20, 22-24, and 29-30 are allowed. The claims are allowed for the reasons stated in the previous office action.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cachet I. Sellman whose telephone number is 571-272-0691. The examiner can normally be reached on Monday through Friday, 7:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cachet I Sellman
Examiner
Art Unit 1792

cis

/William Phillip Fletcher III/
Primary Examiner